

LDRD ANNUAL REPORT CONTENT INSTRUCTIONS

Reports on projects are intended to focus solely on the scientific and/or engineering research and development performed from inception through 2003 fiscal year end. Adequate description of activity in prior years, even if previously reported, is required before emphasizing progress made in FY 2003. Distinct LDRD research projects, whether or not bundled with other distinct lines of research for administrative convenience, must each be reported separately. Call the LDRD Office with any questions in this regard. Reports should be written in a style fully accessible to the non-specialist, avoiding overly technical terminology and jargon that only an expert would understand. Your report must include the following content:

Succinctly state in one paragraph the **purpose** of this project, the scientific and/or technical objective of the research, and its exploratory nature in the context of the current state of its technical field. The "objective" in this context is the expected technical result and its technical implications, i.e., feasibility determination, long-standing scientific question answered, differentiation among alternate engineering solutions, etc. Do not substitute strategic goals for the technical purpose of the work.

Next describe your **approach** to this research devoting separate paragraphs to (1) the background in the technical field that led to your pursuit of this project, (2) the scope of the investigation, i.e., what piece(s) of the problem(s) is (are) being studied, and (3) the methods employed to carry out the work. Mention of collaborators not named as PIs above is appropriate here. We have found that copying and pasting text from your original LDRD proposal is not useful here. The text should be written from the perspective of a project already in progress, not merely proposed.

Follow the above with a section that describes the **technical progress and results** you accomplished. First allude briefly to progress in FY 2001 and 2002, for projects previously funded. Then describe the FY 2003 advances in terms of tests completed, software written, etc. Do not use future tense or present tense progressive (-ing) forms of verbs, but rather simple past tense. Continue with identification of results from this completed work which can be singled out as technical milestones of the project. If appropriate, end with a summary of scientific or technical implications that may be inferred from the results.

If continuation of this work is anticipated, indicate next what additional expected results and milestones are planned in FY 2004. If continuation will be supported from other than LDRD sources, that must be stated explicitly in the section below on "specific accomplishments," clearly identifying all new sponsors.

List quantifiable **specific accomplishments**. These do not include technical milestones alluded to in the previous section. These must include patent applications and invention reports, internal reports, including preliminary design, commitments for future programmatic funding, publications in preparation, submitted, in press, or in print, awards, and external presentations having occurred or scheduled to occur after October 1, 2002. External publications should be grouped according to whether they are refereed or not and further as to whether they are reports of pre-FY 2003 work or include new FY 2003 results. **Note:** *Information provided here must, at a minimum, agree with numerical entries on the attached data collection form, but should also go further in enumerating accomplishments not called for on the form (e.g., publications other than refereed ones, etc.).*

LDRD ANNUAL REPORT FORMATTING INSTRUCTIONS

The minimum report length for all projects is two pages. The maximum length for projects funded at >\$300K in FY03 is limited to 1 page of text per \$150K of funding or fraction thereof. Appending one or two (but no more than two) figures, photos, or tables germane to a technical accomplishment of the work is strongly encouraged. Color figures may only be used if the color is essential to the content of the illustration.

The LDRD annual reports are to be typed single spaced using a 10 pt. Arial font and one-inch margins. Use block paragraphs and justify both margins. Limit page length to 55 lines and do not add page numbers or other headers or footers to text in word processor documents. Add appropriate captions directly to any tables, figures, or photos appended to the report. Do not supply a separate captions page. Please write or manually type page numbers on the printed report text to avoid accidental rearrangement and indicate on the back of any tables, figures or photos their proper order and your project's identifying number.

Submit an electronic copy of your report in either Word Perfect or Microsoft Word for Windows format. If this presents a serious problem, please call Judy Reedy on extension 2-6855 to discuss alternatives. Arrange content as follows:

- Title:** Use full title of project as listed on this memo; use all upper case.
Use a footnote to explain when the FY 2003 activity differs from previous years by encompassing more or fewer subtasks and if the project title differed in previous years.
- Principal Investigator(s):** Full first and last name of the lead principal investigator followed by name of the division on same line; then use one additional line for each additional full name/division for co-investigators.
Do not use division initials nor type the word "division" as part of the name nor name a program instead. All investigators must be Argonne employees. Collaborators such as post docs and consultants should be named in the narrative sections rather than here.
- Funding Profile:** FY 2001 \$(actual \$ spent in thousands)K
 FY 2002 \$(actual \$ spent in thousands)K
 FY 2003 \$(actual \$ spent in thousands)K
 FY 2004 \$(estimated \$...)K
 FY 2005 \$(projected \$...)K
Do not use original proposed amounts which may differ from actual costs. Years 2001-2005 must be listed; enter zero for unfunded years. Estimates for FY 2004 and projections for FY 2005 should be coordinated through ALD offices.

Purpose: (*see 2nd paragraph, Attachment A*)

Approach: (*see 3rd paragraph, Attachment A*)

Technical Progress and Results: (*see 4th and 5th paragraphs, Attachment A*)

Specific Accomplishments: (*see last paragraph, Attachment A*)

All material is due by close of business Monday, December 15, 2003.

INSTRUCTIONS FOR FY 2003 LDRD DATA COLLECTION FORM

The title of each project for which data are required is preprinted on a data collection form, along with its project tracking number and work project cost code. The principal investigator is also listed. This information is supplied to help you identify the projects in question.

[NOTE: Previously-submitted survey forms are attached to the FY2003 data collection forms for those projects that continued into 2003 after having started in 2001 or 2002. These are for your information only. The FY 2003 data collection form requires an entry for each of the data elements from 1 through 10 according to the instructions below. **Major changes from prior years in the definition of some elements have been made and revised data must now be collected for two prior years as well.]**

Data Elements

1. Subject Categories: The OSTI publication "International Energy Subject Categories and Scope" provides a means to specify the topics of research. One primary six-digit code taken from this publication must be assigned to each project. Since many projects overlap more than one area, you may also assign a secondary and tertiary six-digit code to projects as warranted. The codes are available on the LDRD home page at <http://www.anl.gov/LDRD/osticode.html>. Projects active in prior years should enter the same codes as previously unless the work scope has changed significantly.
2. Follow-on Effort: If you know that all or part of the research done under this LDRD project will continue (with or without interruption) under other auspices (such as redirected or new program funds, work-for-others, CRADAs, etc., but not including additional LDRD funding), indicate this by checking "yes" and providing the following pertinent information: Will the follow-on funding be new money or money already allocated to Argonne that will be redirected to your project? Provide the source(s) of all support (if more than one source, list the principal source first). Provide the appropriate tracking identification (e.g., FWP, B&R code, WFO, CRADA) numbers. If, to date, no follow-on support has been obtained, check "No." (The LDRD office must be notified if subsequent to this data call such support is received.) If, for some reason, you cannot determine if a follow-on effort will occur, check "No" but indicate in the remarks section at the bottom of the form what prevented you from knowing whether or not follow-on funding will occur (e.g., "proposals to be submitted," "sponsor has not acted," etc.).

Number of Proposals Submitted: Enter in the box provided the total number of written proposals based on results of this LDRD project (including prior years, if any) that have been submitted to potential sponsors of follow-on work (but not proposals for future LDRD support).

3. Publications: Enter the number of LDRD-derived refereed publications actually published during each of the fiscal years 2001, 2002, 2003. Enter "0" (zero) for none. Enter "NA" if you cannot access the information, and note in the remarks section what prevents you from identifying the publications. **[What's changed:** (1) previously we entered cumulative totals, now we need a separate number for each year, (2) previously we included papers in preparation or in press, now we only want those actually published from October 1 through September 30 of each respective year, (3) previously we were restricted only to those publications based solely on the LDRD project, now we expand the definition to include publications derived in whole or in part from LDRD projects funded in any year.]

4. Students and/or Postdocs: Enter the number of students and postdocs (combined total) supported by the LDRD project during all or part of the respective fiscal year. Do not include any supported by follow-on funds. Enter "0" (zero) if no students or postdocs were supported. Enter "NA" if you cannot determine these data and explain the difficulty in the remarks section. **[What's changed:** (1) previously we entered cumulative totals for all years counting the same person only once, now we enter the number supported in each respective year without regard to whether the same person was supported in other years, (2) previously we accounted for partial support using fractions of an FTE, now we count number of people in whole numbers, whether partially or fully supported, (3) previously we limited the count to those receiving "direct" support, now we include indirect situations such as non-employee students and postdocs at collaborating universities receiving LDRD funds.]
5. New Staff: Enter the number of new, permanent, full-time, technical staff hired during each respective fiscal year as a result of LDRD support. (Note: we are counting "hiring events," not people.) Do not include hires due to follow-on non-LDRD supported projects. New hires need not have been fully supported by the LDRD project to be counted, so long as their being hired can be attributed to the project's existence. Count each new hire as one regardless of partial support (no fractions please). Enter "0" (zero) for no new hires. Enter "NA" if new hires cannot be determined and explain difficulty in remarks section. **[What's changed:** (1) previously we entered cumulative totals for all years, now we are counting hiring events occurring from October 1 through September 30 of each respective fiscal year.]
6. Copyrights: Enter the number of LDRD-derived copyrights (other than for publications) that were granted within each respective fiscal year and were derived in whole or in part **BOTH** directly from the LDRD project funded in any year **AND** from any follow-on efforts to date. (Usually such non-publication copyrights pertain to computer software, circuit designs, etc.) Enter "0" (zero) for no copyrights. Enter "NA" if information is unavailable and explain difficulty in accessing it in the remarks section. **[What's changed:** (1) previously we entered cumulative totals for all years, now we are entering separate numbers corresponding to the number granted from October 1 through September 30 of each respective fiscal year, (2) previously we assumed the copyright originated solely from the LDRD and follow-on efforts, now we are including those that may be only partially attributable to the LDRD and follow-on work.]
7. Invention Disclosures: Enter the number of LDRD-derived invention disclosures filed within each respective fiscal year with the Laboratory's Office of Technology Transfer (OTT) that were derived in whole or in part **BOTH** from any year of the LDRD project directly **AND** from any follow-on efforts to date. Enter "0" (zero) for none. Enter "NA" if information is not available. (We suggest the invention database maintained by OTT may help to identify LDRD-related cases.) **[What's changed:** (1) previously we entered cumulative totals for all years, now we are entering separate numbers corresponding to the number filed from October 1 through September 30 of each respective fiscal year, (2) previously we assumed the invention disclosure originated solely from the LDRD and follow-on efforts, now we are including those that may be only partially attributable to the LDRD and follow-on work.]
8. Patents: Enter the number of LDRD-derived patents issued/granted within each respective fiscal year and derived in whole or in part from **BOTH** any year of the LDRD project directly **AND** from any follow-on efforts. Enter "0" (zero) for none. Enter "NA" if information is not available to you. (Please check Laboratory patent records before assuming the information is unavailable.) **[What's changed:** (1) previously we counted patent applications whether or not granted, now we are restricted to count only those actually issued/granted from October 1 through September 30 of each respective fiscal year, (2) previously we entered cumulative totals for all years, now we are entering separate numbers corresponding to the number granted in each respective year, (3) previously we assumed that the invention corresponding to the patent originated solely from the LDRD and follow-on efforts, now we are including those that may be only partially attributable to the LDRD and follow-on work.]

9. Review Presentations: Attach a separate sheet listing all presentations to review committees that included a description of the work related to this LDRD project. Review events listed on prior-year data collection forms need not be repeated here. These may have occurred during or after the project's active period. The LDRD-related work may have been only part of the presentation. The fact that LDRD support had been involved may not have been explicitly stated in the presentation. The presenter(s) may or may not have been the LDRD principal investigator(s). First list presentations to University of Chicago review committees. Second, list those given to DOE impaneled program review committees. Last, list those given to ANL division- or ALD-chartered and other **external** committees. For each presentation, give the committee name, the presenter's name and division, and the date of the presentation. If no such presentation has occurred, place a check mark in the box at the right of data element 9. Do not include internal presentations made solely to Argonne managers or other employees.
10. Defense versus Non-defense Relevance: If your project's topic focuses almost wholly on actual or potential applications to national defense (i.e., likely agencies to provide follow-on funding are DOD, NNSA, DHS, etc.) enter 100%. If the work is primarily relevant to non-defense applications (e.g., likely to be funded by NSF, NIH, EPA, DOE/SC, etc.) enter 0%. If both apply, make a judgment of the percent defense relevance between 10% and 90%. Projects relevant to the missions of the Department of Homeland Security are categorized as "defense-relevant," **but indicate in the remarks section below if relevance to homeland security is the ONLY reason for your indication of relevance to defense.**
11. Awards: **(New data section for FY 2003!)** On a separate sheet, list any awards or other distinct forms of recognition (from bodies external to Argonne) received during each respective fiscal year that are attributable in whole or in part to an LDRD project funded in any year. Include with each listing the fiscal year in which it was received. (To determine the fiscal year, use the date corresponding to when the actual award is received, not the date it is announced to you or to the public.) Do not include those otherwise valid forms of "recognition," such as an invitation to speak at a conference, if they are quite numerous, and widely and routinely conferred. For each award, provide a short (150 words or less) paragraph describing the significance of the award and the role LDRD played in achieving it. If no such awards were received in a particular fiscal year, place a check mark in the corresponding box to the right of data element 11 on the form.
12. Remarks: Explain here why data requested above is not accessible. Also use this space to indicate if DHS relevance is the sole reason to assign some defense relevance to your project. (Add extra sheets if necessary)